

CLAIMS

What is claimed is:

- 5 1. A method of reducing the bit rate of a video bitstream to meet bandwidth constraints, the method comprising:
- identifying transform coefficients representing video content in a frame or a portion of frame of the video bitstream; and
- filtering selected transform coefficients from the video bitstream to
- 10 thereby reduce the bit rate of the video bitstream
2. The method of claim 1, wherein filtering selected transform coefficients comprises using a cut-off index.
3. The method of claim 2, wherein the cut-off index can be varied on a per block basis.
- 15 4. The method of claim 1, wherein filtering selected transform coefficients comprises using a filter having ones and zeros.
5. The method of claim 1, wherein filtering selected transform coefficients comprises using a filter having threshold values.
6. The method of claim 3, wherein the filter can be altered on a per block
- 20 basis.
7. The method of claim 3, wherein the filter is a low pass, band pass, or high pass filter.
8. A method of filtering transform coefficients associated with an input bitstream, method comprising:
- 25 identifying transform coefficients associated with an input bitstream;
- selecting transform coefficients for filtering to provide modified transform coefficients; and
- generating an output bitstream, wherein the output bitstream associated with modified transform coefficients uses less bandwidth than the input bitstream associated
- 30 with the transform coefficients.
9. The method of claim 8, wherein identifying transform coefficients comprises performing variable length decoding on the input bitstream.
10. The method of claim 8, wherein identifying transform coefficients comprises acquiring the transform coefficients from a file.

11. The method of claim 8, wherein identifying transform coefficients comprises performing a DCT operation on video data.

12. The method of claim 8, wherein identifying transform coefficients comprises performing a DCT operation on audio data.

5 13. The method of claim 8, wherein the transform coefficients are DCT coefficients.

14. The method of claim 8, wherein generating an output bitstream comprises performing variable length coding.

15 15. The method of claim 8, wherein selecting transform coefficients for filtering comprises identifying a cut-off index.

16. The method of claim 8, wherein selecting transform coefficients for filtering comprises identifying a filter.

17. The method of claim 16, wherein the filter comprises zeros and ones.

18. The method of claim 16, wherein the filter comprises threshold values.

15 19. The method of claim 16, wherein the filter is 8x8.

20. The method of claim 16, wherein the filter is a one dimensional array.

21. The method of claim 16, wherein the filter is a low pass filter.

22. An apparatus for filtering transform coefficients associated with input bits to provide modified transform coefficients associated with output bits, the apparatus comprising:

20 an input interface for receiving transform coefficients associated with input bits;

a filtering stage coupled to the input interface, wherein the filtering stage selects transform coefficients for filtering; and

25 an output interface coupled with the filtering stage for providing modified transform coefficients associated with output bits, wherein the number of output bits is less than the number of input bits.

23. The apparatus of claim 22, wherein the input interface comprises a variable length decoder.

30 24. The apparatus of claim 22, wherein the input interface reads the transform coefficients from a file.

25. The apparatus of claim 22, wherein the output interfaces comprises a variable length encoder.

26. The apparatus of claim 22, wherein the filtering stage uses a cut-off index.

27. The apparatus of claim 22, wherein the filtering stage uses a filter that can be altered on a per block basis.

5 28. The apparatus of claim 27, wherein the filter comprises zeros and ones.

29. The apparatus of claim 27, wherein the filter comprises threshold values.

30. The apparatus of claim 27, wherein the filter is a low pass filter.

31. A computer readable medium comprising computer code for filtering
10 transform coefficients associated with an input bitstream, the computer readable medium comprising:

computer code for identifying transform coefficients associated with an input bitstream;

15 computer code for selecting transform coefficients for filtering to provide modified transform coefficients; and

computer code for generating an output bitstream, wherein the output bitstream associated with modified transform coefficients uses less bandwidth than the input bitstream associated with the transform coefficients.

32. The computer readable medium of claim 31, wherein identifying
20 transform coefficients comprises performing variable length decoding on the input bitstream.

33. The computer readable medium of claim 31, wherein identifying transform coefficients comprises acquiring the transform coefficients from a file.

34. The computer readable medium of claim 31, wherein identifying
25 transform coefficients comprises performing a DCT operation on video data.

35. The computer readable medium of claim 31, wherein identifying transform coefficients comprises performing a DCT operation on audio data.

36. The computer readable medium of claim 31, wherein the transform coefficients are DCT coefficients.

30 37. The computer readable medium of claim 31, wherein generating an output bitstream comprises performing variable length coding.

38. The computer readable medium of claim 31, wherein selecting transform coefficients for filtering comprises identifying a cut-off index.

39. The computer readable medium of claim 31, wherein selecting transform coefficients for filtering comprises identifying a filter.

40. An apparatus for reducing the bit rate of a video bitstream to meet bandwidth constraints, the method comprising:

5 means for identifying transform coefficients representing video content in a frame or a portion of frame of the video bitstream; and

means for filtering selected transform coefficients from the video bitstream to thereby reduce the bit rate of the video bitstream

41. The apparatus of claim 40, wherein filtering selected transform
10 coefficients comprises using a cut-off index.

42. The apparatus of claim 40, wherein filtering selected transform coefficients comprises using a filter that can be altered on a per block basis.

43. The apparatus of claim 42, wherein the filter comprises ones and zeros.

44. The apparatus of claim 42, wherein the filter comprises threshold
15 values.

45. The apparatus of claim 42, wherein the filter is a low pass filter.

46. The apparatus of claim 42, wherein the filter is a band pass filter.